

**Remarks**

Applicants are cancelling the elected group of claims 1-17, and are substituting for them new claims 19-79. The four new independent claims (two of which are apparatus and two of which are method) define the same feature that distinguishes them from the prior art -- independent adjustments of the inspiratory and expiratory pressures based upon detection of two respective types of events. (See, for example, section 5.5.6 of the specification at page 12.) Original dependent claims 12-16 were directed to this feature, but the feature is now being made the focus of all four independent claims.

While the Froehlich reference does teach bi-level operation and adjustments based on the detection of respiratory events, the two pressure waveforms (for the two phases of a respiratory cycle) are not changed independently based on the detection of respective types of respiratory events. For this reason, all of the new claims being submitted, the only ones now in the application, are distinguished from Froehlich. And the secondary reference, Berthon-Jones, also does not teach this feature of separate pressure controls for the two phases based on detection of respective types of respiratory events.

In the rejection of original claims 12-16, the Examiner argued that the combination of Froehlich and Berthon-Jones derives indexes and it would have been obvious to "set either or both of the EPAP and IPAP according to these various indexes in order to provide effective treatment to the patient at a minimal pressure as possible to increase comfort." The correct logic is just the opposite. It was well known in the prior art to derive indexes that represented respiratory events that required treatment, and it was well known to adjust a CPAP pressure or bi-level pressures in accordance with the indexes. But despite the derivation of numerous indexes and all kinds of adjustments based on these indexes in the prior art, it occurred to no one to provide independent adjustments for the inspiratory and expiratory phases of a breathing cycle, based on respective

indexes. If the prior art is any guide, it proves that the subject invention was not obvious.

It remains to be shown that each of the four independent claims now in the application defines independent pressure adjustments in accordance with respective indexes. The relevant recitations in the four independent claims are as follows:

Claim 19

automatically determining from at least one of said sensors a first index indicative of the presence of sleep disordered breathing and a second index indicative of the presence of sleep disordered breathing,

automatically determining a first treatment pressure in accordance with the first index of sleep disordered breathing and a second treatment pressure in accordance with the second index of sleep disordered breathing,

setting a pressure parameter of the pressure-time template to the first treatment pressure during the expiration phase of the patient's breathing cycle and setting a pressure parameter of the pressure-time template to the second treatment pressure during the inspiratory phase of the patient's breathing cycle, and

Claim 34

a controller programmed to:

receive signals from the sensors and in response thereto detect the presence of a first event and a second event, the first and second events being different indications of sleep disordered breathing; and

set a first pressure as a function of the occurrence of the first event and set a second pressure as a function of the occurrence of the second event, the first pressure being used to determine the

treatment pressure provided during the expiratory phase of the breathing cycle and the second pressure being used to determine the treatment pressure provided during the inspiratory phase of the breathing cycle.

Claim 50

determining a first index indicative of the presence of sleep disordered breathing and a second index indicative of the presence of sleep disordered breathing,

setting a first pressure parameter of the pressure-time template for the expiration phase of the patient's breathing cycle in accordance with the first index of sleep disordered breathing and setting a second pressure parameter of the pressure-time template for the inspiratory phase of the patient's breathing cycle in accordance with the second index of sleep disordered breathing, and

Claim 65

said controller further determining the presence of a first event and a second event based upon detected information, the first and second events being different indications of sleep disordered breathing; and setting a first pressure as a function of the occurrence of the first event and setting a second pressure as a function of the occurrence of the second event, the first pressure being used to determine the treatment pressure provided during the expiratory phase of the patient's breathing cycle and the second pressure being used to determine the treatment pressure provided during the inspiratory phase of the patient's breathing cycle.

It is believed that all of the claims now in the application are distinguished from the prior art, including the two references relied upon by the Examiner. As required by the Examiner, the specification is being updated to include all parent

cases (two provisionals and the PCT) in the "related cases" section on page 1. It is therefore requested that the claims be allowed and that the application be passed to issue.

Respectfully submitted,

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A handwritten signature in cursive script, appearing to read "Michael Rackman".

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